BRUHAT BANGALORE MAHANAGARA PALIKE

Name of the Agency : **Mr. H.R. Pratap,** Contractor, Bangalore.

Name of the Work : Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Estimate Cost :

QUALITY CONTROL REPORTS TO

ASST. EXECUTIVE ENGINEER
Kodigehalli Sub Division
BBMP, Bangalore.

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QUALITY CONTROL REPORTS FOR

CIVIL WORKS

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Job No.: CTCE/BBMP/HRP/W.No.07/CEMENT/2014-15

Date: 27.08.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer**, Kodigehalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Mr. H.R. Pratap,** Contractor, Bangalore.
NAME OF THE WORK	:	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
REFERENCE	:	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
SAMPLE ID	:	Cement
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4)	28.50 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	155 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	480 Minutes	Not More than 600 Minutes
3	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm

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JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/HRP/W.No.07/SAND/2014-15 : 27.08.2014

TEST REPORT ON FINE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.R. Pratap,** Contractor, Bangalore.

Name of Work : Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014

Date of Testing : 27.08.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	58	5.80	5.80	94.2	90-100
2.36	112	11.20	17.00	83.0	75-100
1.18	223	22.30	39.30	60.7	55-90
600 Micron	208	20.80	60.10	39.9	35-59
300 Micron	236	23.60	83.70	16.3	8-30
150 Micron	82	8.20	91.90	8.1	0-10

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QUALITY CONTROL REPORTS FOR

WET MIX MACADAM (WMM)

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Job No.: CTCE/BBMP/HRP/W.No.07/WMM/Gradation/2014-15

27.08.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.R. Pratap,** Contractor, Bangalore.

Name of Work : Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014

Date of Testing : 27.08.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 8685

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	215	215	2.5	97.5	95-100
22.4	2365	2580	29.7	70.3	60-80
11.2	1970	4550	52.4	47.6	40-60
4.75	1245	5795	66.7	33.3	25-40
2.36	985	6780	78.1	21.9	15-30
0.600	720	7500	86.4	13.6	8-22
0.075	845	8345	96.1	3.9	0-8

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Job No.: CTCE/BBMP/HRP/W.No.07/WMM/Gradation/2014-15

27.08.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.R. Pratap,** Contractor, Bangalore.

Name of Work : Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014

Date of Testing : 27.08.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 8745

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	285	285	3.3	96.7	95-100
22.4	2265	2550	29.2	70.8	60-80
11.2	1840	4390	50.2	49.8	40-60
4.75	1325	5715	65.4	34.6	25-40
2.36	975	6690	76.5	23.5	15-30
0.600	815	7505	85.8	14.2	8-22
0.075	760	8265	94.5	5.5	0-8

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27.08.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.R. Pratap,** Contractor, Bangalore.

Name of Work : Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014

Date of Testing : 27.08.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8660**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	315	315	3.6	96.4	95-100
22.4	2340	2655	30.7	69.3	60-80
11.2	1850	4505	52.0	48.0	40-60
4.75	1275	5780	66.7	33.3	25-40
2.36	965	6745	77.9	22.1	15-30
0.600	740	7485	86.4	13.6	8-22
0.075	805	8290	95.7	4.3	0-8

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Job No.: CTCE/BBMP/HRP/W.No.07/WMM/AIV/2014-15

27.08.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of the Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	27.08.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	388	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	87	82	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	303	
4	Aggregate Impact value = percent fines	22.42	21.30	
	100* (W_2/W_1)%			21.86

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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27.08.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of the Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	27.08.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	390	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	86	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	302	303	
4	Aggregate Impact value = percent fines	22.56	22.11	
	100* (W_2/W_1)%			22.34

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of the Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	27.08.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	388	386	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	89	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	299	302	
4	Aggregate Impact value = percent fines	22.94	21.76	
	100* (W_2/W_1)%			22.35

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Job No.: CTCE/BBMP/HRP/W.No.07/WMM/S-T/2014-15 27.08.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	27.08.2014

Result : Flakiness Index = **11.56%**

Elongation Index = **13.89%**

Result : Combined Flakiness & Elongation index **25.45%**

Comments:

→ Maximum allowable Flakinee & Elongation Index for Wet Mix Macadam is 30%

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DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	27.08.2014

Result : Flakiness Index = **12.63%**

Elongation Index = **13.74%**

Result : Combined Flakiness & Elongation index **26.37%**

Comments:

→ Maximum allowable Flakinee & Elongation Index for Wet Mix Macadam is 30%

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DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.R. Pratap,** Contractor, Bangalore.
Name of Work	Improvements to roads in BGS Layout in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TEND/84/2014-15 Dated: 25.08.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	27.08.2014

Result : Flakiness Index = **11.96%**

Elongation Index = **13.52%**

Result : Combined Flakiness & Elongation index **25.48%**

Comments:

→ Maximum allowable Flakinee & Elongation Index for Wet Mix Macadam is 30%

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